

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY-	)	CASE NO.
AMERICAN WATER COMPANY FOR AN	)	2021-00434
ALTERNATIVE RATE ADJUSTMENT	)	

NOTICE OF FILING OF COMMISSION STAFF'S REPORT

Notice is hereby given that, in accordance with the Commission's Order of March 11, 2022, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's March 11, 2022 Order, Kentucky-American Water Company (Kentucky-American) is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs Kentucky-American to the Commission's July 22, 2021 Order in Case No. 2020-00085<sup>1</sup> regarding filings with the Commission.

  
Linda C. Bridwell, PE  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED APR 25 2022

cc: Parties of Record

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<sup>1</sup> Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

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COMMISSION STAFF'S REPORT ON  
KENTUCKY-AMERICAN WATER COMPANY

Kentucky-American Water Company (Kentucky-American), a Kentucky corporation, owns and operates water production and distribution facilities that provide water service to 134,931 customers for compensation in Bourbon, Clark, Fayette, Franklin, Gallatin, Grant, Harrison, Jackson, Jessamine, Nicholas, Owen, Rockcastle, Scott, and Woodford counties, Kentucky.<sup>1</sup> Its wastewater division owns and operates sewage collection and treatment facilities in Clark, Owen, Bourbon, and Franklin counties, Kentucky, that serve 1,378 customers.<sup>2</sup>

On December 1, 2021, Kentucky-American filed its application to the Commission requesting to adjust its sewer rates pursuant to 807 KAR 5:076. To ensure the orderly review of the application, the Commission established a procedural schedule by Order dated December 10, 2021. On February 28, 2022, Kentucky-American filed a motion to file supplemental testimony due to an error in the billing determinants and rate design

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<sup>1</sup> *Annual Report of Kentucky-American Water Company to the Public Service Commission for the Calendar Year Ended December 31, 2020* at 11 and 54.

<sup>2</sup> *Annual Report of Kentucky-American Water Company Sewer Division to the Public Service Commission for the Calendar Year Ended December 31, 2020* (2020 Annual Report Sewer Division) at 9 and 26.

contained in Kentucky-American’s original filed application. In order to adequately review the new information presented in Kentucky-American’s supplemental testimony, the Commission, in an Order dated March 11, 2022, amended the procedural schedule, approved Kentucky-American’s motion, allowed the filing of a supplemental request for information, and extended the issuance date of the Staff Report.

To comply with the requirements of 807 KAR 5:076, Section 9, Kentucky-American based its requested rates on a historic test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission: the calendar year ended December 31, 2020.

Using the operating ratio method<sup>3</sup> and its pro forma test-year operations, Kentucky-American determined that its sewer division could justify a revenue increase of \$938,827, or 130.97 percent, as shown in the table below.<sup>4</sup> However, Kentucky-American submitted a billing analysis showing that the test-year revenue from sewer rates was \$684,919,<sup>5</sup> which is \$31,910 below the reported level of \$716,829. Adjusting Kentucky-American’s revenue requirement calculation to reflect its billing analysis results in an actual requested increase of \$970,737, or 141.73 percent.<sup>6</sup>

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<sup>3</sup> Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues. It is illustrated by the following equation:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

<sup>4</sup> Application, 5. \_KAWC\_Case\_No.\_2021-00434\_RR-OR.pdf, Revenue Requirement Calculation – Operating Ratio Method.

<sup>5</sup> Application, 6. \_KAWC\_Case\_No.\_2021-00434\_Bill\_Analysis\_Attachment.pdf.

<sup>6</sup> \$1,655,656 (Revenue Required from Sewer Service) - \$684,919 (Revenue per Billing Analysis) = \$970,737 (Required Revenue Increase). \$970,737 (Required Revenue Increase ÷ \$684,919 (Revenue per Billing Analysis) = 141.73%.

Pro Forma Operating Expenses before Income Taxes	\$ 1,314,076
Divide by: Operating Ratio	<u>88%</u>
Sub-Total	1,493,268
Less: Pro Forma Operating Expenses before Income Taxes	<u>(1,314,076)</u>
Net Operating Income Allowable	179,192
Add: Provision for State and Federal Income Taxes	30,421
Interest Expense	142,792
Pro Forma Operating Expenses before Income Taxes	<u>1,314,076</u>
Total Revenue Requirement	1,666,481
Less: Other Operating Revenues	(10,825)
Interest Income	<u>0</u>
Revenue Required from Sewer Service	1,655,656
Less: Normalized Revenue - Sewer	<u>(716,829)</u>
Required Revenue Increase	<u>\$ 938,827</u>
Percentage Increase	<u>130.97%</u>
Income Tax - Revenue Req.	59,572
Less: Amortization of Deferred Income Tax	<u>(29,151)</u>
Net Income Tax	<u>\$ 30,421</u>

Based on the principle of gradualism, Kentucky-American proposed a four-step rate increase and in the fourth and final phase, Kentucky-American consolidated its current five district rate design into a single statewide unified rate design.<sup>7</sup> The table below shows the impact the proposed phase in rate increases would have upon the average sewer bill for a residential customer in each of the five Kentucky-American Service territory.<sup>8</sup>

<sup>7</sup> Application, 2.\_KAWC\_Case\_No.\_2021-00434\_Reasons\_for\_Application.pdf.

<sup>8</sup> Kentucky-American's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed Feb. 28, 2022), Excel Workbook: KAW\_Case\_No.\_2021-00434\_Supplemental\_Bill\_Analysis\_022822.xlsx; Tab: Total.

	Average Usage	Current Rates		Phase 1 Proposed Rates		
		Bill	Bill	Dollar Inc.	Percentage Inc.	
Ridgewood	Flat Rate	\$ 35.14	\$ 44.47	\$ 9.33	26.55%	
Millersburg	2,702	\$ 31.34	\$ 41.26	\$ 9.92	31.65%	
Owenton	2,583	\$ 34.39	\$ 44.42	\$ 10.03	29.17%	
North Middletown	3,238	\$ 36.52	\$ 46.63	\$ 10.11	27.68%	
Rockwell	2,932	\$ 32.67	\$ 41.89	\$ 9.22	28.22%	

	Average Usage	Phase 1 Bill	Phase 2 Proposed Rates		
			Bill	Dollar Inc.	Percentage Inc.
Ridgewood	Flat Rate	\$ 44.47	\$ 56.54	\$ 12.07	27.14%
Millersburg	2,702	\$ 41.26	\$ 54.20	\$ 12.94	31.36%
Owenton	2,583	\$ 44.42	\$ 56.69	\$ 12.27	27.62%
North Middletown	3,238	\$ 46.63	\$ 59.81	\$ 13.18	28.27%
Rockwell	2,932	\$ 41.89	\$ 54.20	\$ 12.31	29.39%

	Average Usage	Phase 2 Bill	Phase 3 Proposed Rates		
			Bill	Dollar Inc.	Percentage Inc.
Ridgewood	Flat Rate	\$ 56.54	\$ 71.90	\$ 15.36	27.17%
Millersburg	2,702	\$ 54.20	\$ 70.46	\$ 16.26	30.00%
Owenton	2,583	\$ 56.69	\$ 71.56	\$ 14.87	26.23%
North Middletown	3,238	\$ 59.81	\$ 76.95	\$ 17.14	28.66%
Rockwell	2,932	\$ 54.20	\$ 71.43	\$ 17.23	31.79%

	Average Usage	Phase 3 Bill	Phase 4 Proposed Rates		
			Bill	Dollar Inc.	Percentage Inc.
Ridgewood	Flat Rate	\$ 71.90	\$ 90.00	\$ 18.10	25.17%
Millersburg	2,702	\$ 70.46	\$ 91.51	\$ 21.05	29.88%
Owenton	2,583	\$ 71.56	\$ 90.12	\$ 18.56	25.94%
North Middletown	3,238	\$ 76.95	\$ 97.77	\$ 20.82	27.06%
Rockwell	2,932	\$ 71.43	\$ 94.20	\$ 22.77	31.88%

On February 28, 2022, Kentucky-American filed supplemental testimony for the purpose of correcting an error in the calculation of the billing determinants used for customers with a meter greater than or equal to one inch.<sup>9</sup> This revision had no impact on the revenue requirement; however, the revision did impact the revenue allocation and rate design. Kentucky-American requested that the updated billing determinates and rate

<sup>9</sup> Supplemental Testimony of Tricia Sinopole (Sinopole Supplemental) (filed Feb. 28, 2022).

design be approved.<sup>10</sup> Kentucky-American also filed a revised notice but did not mail the amended notice to its wastewater customers, until after approved by the Commission.<sup>11</sup> Commission Staff applied the revised billing determinants in the recommendations contained in this Commission Staff's Report.

To determine the reasonableness of the sewer rates requested by Kentucky-American, Commission Staff performed a limited financial review of Kentucky-American's test-year operations. The scope of Commission Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

Commission Staff's recommendations are summarized in this report. Mark Frost reviewed Kentucky-American's Pro Forma Operating Expenses and its Overall Revenue Requirement. Jason Green and Mary Beth Purvis reviewed Kentucky-American's reported revenues and rate design.

### SUMMARY OF FINDINGS

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio method, as generally accepted by the Commission, Commission Staff found that Kentucky-American's sewer division required an Overall Revenue Requirement of \$1,643,282. To meet the Overall Revenue Requirement,

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<sup>10</sup> Sinopole Supplemental at 7.

<sup>11</sup> Sinopole Supplemental at 7.

Kentucky-American requires a \$940,985, or 137.39 percent, revenue increase to pro forma present rate revenues.

2. Monthly Sewer Service Rates. In its application, Kentucky-American proposed to unify and consolidate its monthly wastewater service rates into a single-priced rate design that contains both monthly service charges as well as volumetric charges.<sup>12</sup> The only exception is Kentucky-American's Ridgewood service area, which was kept at a monthly flat rate because Kentucky-American does not have customer usage or meter information that would allow the rate to be revised to a declining block rate structure.<sup>13</sup> Kentucky-American stated that it plans to have discussions with Ridgewood's water provider to obtain the information that would allow Kentucky-American to charge a rate with a volumetric component.<sup>14</sup> Kentucky-American did not perform a cost of service study (COSS).<sup>15</sup> Kentucky-American stated that it did not complete a COSS at this time, as these studies are generally not used in wastewater service rate design.<sup>16</sup>

Kentucky-American stated that the unified rate design structure was modeled after its North Middletown service area because this rate design is the most representative structure of the five existing rate designs.<sup>17</sup> Kentucky-American added that the North

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<sup>12</sup> Application, Reasons for Application.

<sup>13</sup> Direct Testimony of Tricia Sinopole (Sinopole Testimony) at 9.

<sup>14</sup> Sinopole Testimony at 9 and Kentucky-American's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Jan 24, 2022), Item 22.

<sup>15</sup> Application, Reasons for Application.

<sup>16</sup> Kentucky-American's Response to Staff's First Request, Item 21c.

<sup>17</sup> Kentucky-American's Response to Staff's First Request, Item 21a.

Middletown service area rates contained both monthly service charges as well as volumetric charges, including a volumetric rate for usage above 2,000 gallons per month, and had a more manageable number of volumetric rate steps.<sup>18</sup> Kentucky-American's other service areas either did not have both monthly service and volumetric charges, rate for usage over 2,000 gallons per month, or a large number of volumetric rate steps.<sup>19</sup>

Kentucky-American asserted that several benefits of a unified rate structure are improved affordability for customers, lower administrative and regulatory costs, and incentives to purchase smaller, underperforming sewer utilities.<sup>20</sup> Kentucky-American stated that it did not apply the increase across the board, as traditionally done in the absence of a COSS, because such a rate design is applied to increases by customer class, not by rate district or jurisdiction.<sup>21</sup>

Commission Staff recognizes that in past cases, the Commission has supported unified rates for Kentucky-American's water operations, but in each of these cases, Kentucky-American has provided a COSS in support of its rate design. Further, although Kentucky-American stated that there are benefits in the long-run associated with consolidated pricing, Kentucky-American did not provide any support for these assertions.<sup>22</sup> The Commission has previously found that the allocation of a revenue adjustment evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that an across-the-board

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<sup>18</sup> Kentucky-American's Response to Staff's Second Request, Item 11a.

<sup>19</sup> Kentucky-American's Response to Staff's Second Request, Item 11a.

<sup>20</sup> Kentucky-American's Response to Staff's First Request, Item 17; and Sinopole Testimony at 6.

<sup>21</sup> Kentucky-American's Response to Staff's First Request, Item 21c.

<sup>22</sup> Kentucky-American's Response to Staff's First Request, Item 20e.

method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Commission Staff has allocated the \$940,985 revenue increase across the board to Kentucky-American’s monthly wastewater service rates for all service areas.

Kentucky-American requested a four-year rate phase-in of its proposed rate increase based on the principle of gradualism. Its proposed rates would become effective June 1, 2022, followed by increases on June 1, 2023, June 1, 2024, and a final increase on June 1, 2025.<sup>23</sup> Each of the yearly increases was calculated to keep the monthly increase for an average user the same percentage for each year. Commission Staff agrees with Kentucky-American’s phase-in approach and has calculated the monthly service rates to follow this methodology.

The rates set forth in the Appendix to this report are based upon the revenue requirement, as calculated by Commission Staff, and will produce sufficient revenues to recover the \$1,514,904 Revenue Required from Sewer Service, an approximate 137.39 percent increase. A four-year phase-in was applied to each service territory so that the approximately 137.39 percent increase in rates will occur over four years.<sup>24</sup> These rates will increase a typical residential customer’s monthly sewer bill as follows:

<sup>23</sup> Application, Reasons for Application.

<sup>24</sup> Commission Staff used KAW\_R\_PSCDR3\_Num005\_032822\_Attachment\_across the board BA.xlsx (filed Mar. 28, 2022) to apply the across-the-board increase. The following billing determinants were updated to match the billing analysis so that the test year revenue equaled \$684,919.

<u>Service Area</u>	<u>Rate</u>	<u>Filed</u>	<u>Updated</u>
Owenton	Res Service Charge	6,869	6,971
North Middleton	Res Service Charge	3,021	3,022
	First 2,000	51,917	52,047
	Next 3,000	31,360	31,336
	Next 5,000	8,556	8,504
	Over 10,000	16,656	16,602
Rockwell	Non-Res Service Charge	60	59
	First 10,000 Gallons	32,217	33,376
	Over 10,000 Gallons	11,424	10,263

	<u>Current</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
<u>Ridgewood</u> <sup>25</sup>					
Avg. Bill	\$35.14	\$43.54	\$54.02	\$67.10	\$83.42
Increase		\$8.40	\$10.48	\$13.08	\$16.32
% Increase		23.90%	24.07%	24.21%	24.32%
Overall % Inc.		23.90%	53.73%	90.55%	137.39%
<u>Millersburg</u> <sup>26</sup>					
Avg. Bill	\$31.34	\$38.83	\$48.18	\$59.85	\$74.41
Increase		\$7.49	\$9.35	\$11.67	\$14.56
% Increase		23.90%	24.07%	24.22%	24.33%
Overall % Inc.		23.90%	53.72%	90.95%	137.39%
<u>Owenton</u> <sup>27</sup>					
Avg. Bill	\$34.39	\$42.61	\$52.87	\$65.67	\$81.64
Increase		\$8.22	\$10.26	\$12.80	\$15.97
% Increase		23.90%	24.07%	24.22%	24.32%
Overall % Inc.		23.90%	53.72%	90.95%	137.39%
<u>North Middleton</u> <sup>28</sup>					
Avg. Bill	\$36.52	\$45.25	\$56.14	\$69.73	\$86.69
Increase		\$8.73	\$10.89	\$13.59	\$16.96
% Increase		23.90%	24.07%	24.21%	24.32%
Overall % Inc.		23.90%	53.72%	90.94%	137.38%
<u>Rockwell</u> <sup>29</sup>					
Avg. Bill	\$32.67	\$40.48	\$50.22	\$62.38	\$77.56
Increase		\$7.81	\$9.74	\$12.16	\$15.18
% Increase		23.90%	24.07%	24.21%	24.33%
Overall % Inc.		23.90%	53.72%	90.94%	137.39%

<sup>25</sup> Ridgewood customers have a flat rate per month.

<sup>26</sup> The typical residential customer for Millersburg uses approximately 2,702 gallons per month.

<sup>27</sup> The typical residential customer for Owenton uses approximately 2,583 gallons per month.

<sup>28</sup> The typical residential customer for North Middleton uses approximately 3,238 gallons per month.

<sup>29</sup> The typical residential customer for Rockwell uses approximately 2,932 gallons per month.

Nonrecurring Charges. Following the Commission’s recent decisions,<sup>30</sup> Commission Staff has reviewed Kentucky-American’s Nonrecurring Charges. The Commission found that because district personnel are currently paid during normal business hours, estimated labor costs previously included in determining the amount of nonrecurring charges should be eliminated from the charges. Kentucky-American provided the cost justification for the nonrecurring charges.<sup>31</sup> Commission Staff reviewed the cost justification information provided by Kentucky-American and have adjusted these charges by removing Field Labor Costs and Office/Clerical Labor Costs. Such adjustments result in the following revised Nonrecurring Charges:

<u>Nonrecurring Charge</u>	<u>Current Charge</u>	<u>Revised Charge</u>
Reconnection Fee	\$56	\$6
Nonsufficient Funds Charge	\$12	\$12
Activation Fee	\$28	\$3

The adjustments to the Nonrecurring Charges result in a decrease in Other Operating Revenue of (\$125) as shown below.

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<sup>30</sup> Case No. 2020-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020); Case No. 2020-00167, *Electronic Application of Ohio County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 3, 2020); Case No. 2020-00196, *Electronic Application of West Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020); and Case No. 2020-00195, *Electronic Application of Southeast Daviess County Water District for an Alternative Rate Adjustment* (Ky. PSC Dec. 30, 2020).

<sup>31</sup> Kentucky-American’s Response to Staff’s Second Request, Item 10b.

<u>Charge</u>	<u>No. of Occurrences</u>	<u>Current NRC</u>	<u>Adjusted NRC</u>	<u>Pro Forma</u>
Reconnection Fee	0	\$56	\$6	\$0
Nonsufficient Funds Charge	0	\$12	\$12	\$0
Activation Fee	5	\$28	\$3	\$15
				<hr/>
Pro Forma Test Year NRC Revenue				\$15
Less: Test Year NRC Revenue				\$140
Adjustment				<hr/> -\$125 <hr/>

### PRO FORMA OPERATING STATEMENT

Kentucky-American's Pro Forma Operating Statement for the test year ended December 31, 2020, as determined by Commission Staff, appears below.

	Test Year Actual	Pro Forma Adjustment	Adj. Ref.	Pro Forma Operations
Operating Revenues				
Sewage Service Revenues:				
Flat Rate Revenues	\$ 41,556	\$ (3,183)	A	\$ 38,373
Measured Revenues	675,273	(28,727)	A	646,546
Toil Sewage Service Revenues	716,829	(31,910)		684,919
Other Operating Revenues:				
Forfeited Discounts	3,085	6,678	B	\$ 9,763
Misc.. Operating Revenues	7,740	(125)	C	7,615
Total Other Operating Revenues	10,825	6,553		17,378
Total Operating Revenues	727,654	(25,357)		702,297
Operating Expenses				
Operation and Maintenance Expenses				
Labor and Expenses:				
Pumping - Labor, Materials & Expenses	157,915			157,915
Treatment Systems:				
Sludge Hauling	54,936			54,936
Other-Labor,Materials, and Exp.	102,006			102,006
Purchased Power for Pumping	130,102			130,102
Chemicals	23,814			23,814
Misc. Supplies and Maintenance	268,179	(9,913)	D	242,191
Customer Accounts Exp:		(16,075)	E	242,191
Miscellaneous Customer Accounts	167			167
Administrative and General Exp:				
Administrative and General Salaries	7,335	28,372	F	43,707
Office Supplies and Other Exp.	233	8,000	G	233
Insurance Expenses	2,850	423	H	3,273
Employee Pensions and Benefits	87,328	6,185	I	93,513
Regulatory Commission Expense		10,942	J	10,942
Transportation Expenses	15,731			15,731
Miscellaneous General Exp.	5,001			5,001
Total Operation and Maintenance Expenses	855,597	27,934		883,531
Depreciation	467,299	(17,343)	K	450,369
Amortization	(60,437)	413	D	(58,829)
Taxes Other Than Income	19,379	1,608	E	19,379
Total Operating Expenses	1,281,838	12,613		1,294,451
Net Operating Income	(554,184)	(37,970)		(592,154)
Other Deductions - Interest Long-Term Debt	0	142,782	L	142,782
Net Income	\$ (554,184)	\$ (180,752)		\$ (734,936)

(A) Billing Analysis. Kentucky-American provided a billing analysis listing the water usages and water sales revenue for the 12-month test year. The total metered water sales revenue reported for the test year is \$684,919.<sup>32</sup> Kentucky-American choose not to adjust the test-year revenues of \$716,829 by \$31,910 to account for the current revenues reflected in the billing analysis and lower the proposed revenue increase.<sup>33</sup> Traditionally, this adjustment is performed to match revenues and test years sales. Therefore, Commission Staff normalized this revenue and decreased test-year sewage service revenues by \$3,183 for the flat rate revenues and \$28,727 for the measured revenues.

(B) Forfeited Discounts. During the test year, Kentucky-American recorded \$3,085 in Forfeited Discounts. Given that the test year occurred during the moratorium regarding the collection of late payment fees due to the COVID-19 pandemic, Commission Staff normalized the revenue from Forfeited Discounts using a three-year average of the reported income from late fees in the years 2017,<sup>34</sup> 2018,<sup>35</sup> and 2019.<sup>36</sup> Based upon a three-year average of \$9,763, Commission Staff increased Forfeited Discounts by \$6,678.

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<sup>32</sup> Kentucky-American's Supplemental Bill Analysis (filed Feb. 28, 2022), KAW\_Case\_No.\_2021-00434\_Supplemental\_Bill\_Analysis\_022822.xlsx

<sup>33</sup> Application, Reasons for Application.

<sup>34</sup> *Annual Report of Kentucky-American Water Company to the Public Service Commission for the Calendar Year Ended December 31, 2017* at 26.

<sup>35</sup> *Annual Report of Kentucky-American Water Company to the Public Service Commission for the Calendar Year Ended December 31, 2018* at 25.

<sup>36</sup> *Annual Report of Kentucky-American Water Company to the Public Service Commission for the Calendar Year Ended December 31, 2019* at 25.

<u>Year</u>	<u>Forfeited Discounts</u>
2019	\$9,879
2018	\$9,417
2017	<u>\$9,992</u>
Average	<u>\$9,763</u>

(C) Miscellaneous Service Revenues. As shown above, the adjustment to the Nonrecurring Charges results in a decrease in Miscellaneous Service Revenues of \$125.

(D) Miscellaneous Supplies and Maintenance – Capital Expenditures. Kentucky-American reported test year Miscellaneous Supplies and Maintenance expense of \$268,179.<sup>37</sup> In its review of the 2020 general ledger<sup>38</sup> and the test-year invoices,<sup>39</sup> Commission Staff discovered that Kentucky-American had expensed the following:

<u>Description</u>	<u>Amount</u>
Engine Driven Utility Pump	\$ (1,029)
Ridgewood WWTP-Sludge Weir	(3,288)
1VL24 Gas Regulator, Demand Flow	(473)
23YD98/Automated Test System, 100-240VAC	(4,268)
Installed Sump Pump in Manhole	<u>(855)</u>
 Total Capital Expenditures	 <u>\$ (9,913)</u>

The identified expenditures are considered capital costs that should not be recorded as an expense in the year incurred, but rather depreciated over their estimated useful lives. Commission Staff is reducing test-year materials and supplies expense by \$9,319 to remove the capital expenditures. Depreciating the capital expenditures over

<sup>37</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Schedule of Adjusted Operations. \$11,540 (Misc. Supplies and Exp. – Collection System) + \$164,784 (Misc. Supplies and Exp. – Treatment and Disposal) + \$20,675 (Maintenance – Pumping System) + \$71,180 (Maintenance – Treatment and Disposal) = \$268,179.

<sup>38</sup> Kentucky-American's Response to Staff's First Request, Item 2, Excel Workbook: KAW\_R\_PSCDR1\_NUM002\_012422.xlsx2020 General Ledger.

<sup>39</sup> Kentucky-American's Responses to Staff's Second Request, Item 6.

their estimated useful lives<sup>40</sup> results in an increase to depreciation expense by \$413 as calculated in the table below.

Description	Amount	Depreciation	
		Life	Expense
Engine Driven Utility Pump	\$ 1,029	20	\$ 51
Ridgewood WWTP-Sludge Weir	3,288	40	82
1VL24 Gas Regulator, Demand Flow	473	20	24
23YD98/Automated Test System, 100-240VAC	4,268	20	213
Installed Sump Pump in Manhole	855	20	43
Depreciation Expense Adjustment	<u>\$ 9,913</u>		<u>\$ 413</u>

(E) Materials and Supplies – Nonrecurring Expenditures. Upon further review of the 2020 general ledger<sup>41</sup> and the test-year invoices,<sup>42</sup> Commission Staff discovered that Kentucky-American had expensed the cost to repair gravel driveways of \$16,075. For ratemaking purposes, costs that are classified as nonrecurring are removed from a utility’s operating expenses and are amortized over their estimated useful life. Commission Staff is reducing Materials and Supplies expense by \$16,075 to eliminate the gravel driveway repairs that would be classified as nonrecurring for ratemaking purposes. Operating expenses are being increased by \$1,608<sup>43</sup> to reflect amortizing the trencher repair costs over ten years.

(F) Administrative and General Salaries – Management Salaries. Kentucky-American proposed to increase its test-year Administrative and General Salaries expense

<sup>40</sup> Kentucky-American’s Response to Staff’s Third Request for Information (Staff’s Third Request) (filed Mar. 28, 2022), Item 6.b., Excel Workbook: KAW\_R\_PSCDR3\_NUM006\_032822\_Attachment.xlsx.

<sup>41</sup> Kentucky-American’s Response to Staff’s First Request, Item 2, Excel Workbook: KAW\_R\_PSCDR1\_NUM002\_012422.xlsx2020 General Ledger.

<sup>42</sup> Kentucky-American’s Response to Staff’s Second Request, Item 6.

<sup>43</sup> \$16,075 (Gravel Driveway Repair Costs) ÷ 10 (Years) = \$1,608.

by \$10,159.<sup>44</sup> Kentucky-American explained that its proposed adjustment was proposed and accepted in Case No. 2018-00358.<sup>45</sup>

Currently, Kentucky-American does not allocate any of the management staff salaries to its sewer division. In Case No. 2014-00319,<sup>46</sup> Commission Staff determined that the ratio of salaries directly charged to the sewer division to the total non-management salaries was an appropriate factor to use in allocating the management salaries to the sewer division.<sup>47</sup> Using the 2013 test-year salaries, the allocation factor used by Commission Staff to allocate management salaries was 0.9854 percent.<sup>48</sup> Updating the sewer allocation factor to use the 2020 salary information results in a 2.53 percent factor.<sup>49</sup>

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<sup>44</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Sewer Operations and Maintenance Expenses and References, Ref (1).

<sup>45</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, References, Ref (1). Case No. 2018-00358, *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates* (Ky. PSC Jun. 27, 2019).

<sup>46</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, References, Ref (1). Case No. 2014-00390, *Application of Kentucky-American Water Company for an Adjustment of its Wastewater Rates Pursuant to 807 KAR 5:076* (Ky. PSC July 2, 2015).

<sup>47</sup> Case No. 2014-00390, Mar. 31, 2015 Staff Report at 9–10.

<sup>48</sup> Case No. 2014-00390, Mar. 31, 2015 Staff Report at 9.

<sup>49</sup> Kentucky-American Responses to Staff's Third Request, Item 7, Excel Workbook: KAW\_R\_PSCDR3\_NUM007\_032822\_Attachment.xlsx.

An adjustment to reflect the actual 2021 management salaries would meet the ratemaking criteria of being known and measurable.<sup>50</sup> Using the 2021 management salary information and the updated allocation factor, Commission Staff is increasing Administrative and General Salaries expense by \$28,372 as calculated in the table below.

Kentucky-American's Test-Year Management Salaries	\$ 1,887,154
Less: Management Salaries Capitalized	<u>(765,724)</u>
Net Management Salaries	1,121,430
Multiplied by: Allocation Factor	<u>2.53%</u>
Management Sewer Allocation	<u><u>\$ 28,372</u></u>

(G) Administrative and General Salaries – Service Company Allocation.

Kentucky-American proposed to increase its test-year Administrative and General Salaries expense by \$10,573.<sup>51</sup> Kentucky-American explained that a similar adjustment was proposed and accepted in Case No. 2018-00358.<sup>52</sup>

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<sup>50</sup> See, 807 KAR 5:001, Section 16.1.(a).; Case No. 2001-00211, *The Application of Hardin County Water District No. 1 for (1) Issuance of Certificate of Public Convenience and Necessity; (2) Authorization to Borrow Funds and to Issue Its Evidence of Indebtedness Therefor; (3) Authority to Adjust Rates; and (4) Approval to Revise and Adjust Tariff* (Ky. PSC Mar. 1, 2002); Case No. 2002-00105, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 25, 2003); Case No. 2017-00417, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works* (Ky. PSC July 12, 2018); and Case No. 2019-00080, *Electronic Proposed Adjustment of the Wholesale Water Service Rates of the City of Pikeville to Mountain Water District* (Ky. PSC Dec. 19, 2019).

<sup>51</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Sewer Operations and Maintenance Expenses and References, Ref (1).

<sup>52</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, References, Ref (1).

In 2021, the Service Company billed Kentucky-American \$12,533,559<sup>53</sup> for providing various support services, including the use of centralized call centers and a water quality testing lab; information technology support; accounts payable and accounts receivable; tax support; insurance; and corporate governance. Using the Support Services allocation method used in Case No. 2014-00390<sup>54</sup> updated to reflect calendar year 2021 information, Commission Staff is increasing Administrative and General Salaries expense by \$8,000 as calculated in the table below.

Total Water Customers as of 12/31/21	136,214
Wastewater Customers as of 12/31/21	1,364
Total Customers	<u>137,578</u>
Less Dual Customers	(1,277)
	136,301
Water Percentage	99.94%
Wastewater Percentage	0.06%
2021 Unaudited Total KAW Service Co. Expense	\$ 12,533,559
Sewer Allocated Service Co. Expense as of 12/31/21	<u>\$ 8,000</u>

(H) Insurance. Kentucky-American proposed to increase its test-year Insurance expense of \$2,850 by \$545 for a pro forma level of \$3,395.<sup>55</sup> Kentucky-American explained that its proposed adjustment was based on an allocation of allocations of workers' compensation and general liability insurances (Insurance) that was used in Case No. 2018-00358.<sup>56</sup> Updating the Insurance allocation to reflect the

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<sup>53</sup> Kentucky-American's Responses to Staff's First Request, Item 15, Excel Workbook: KAW\_R\_PSCDR1\_NUM15\_012422\_Attachment Confidential.xlsx, Tab: ServCo.

<sup>54</sup> Case No. 2014-00390, Mar. 31, 2015 Staff Report at 12.

<sup>55</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Sewer Operations and Maintenance Expenses and References, Ref (2).

<sup>56</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, References, Ref (3).

2021 insurance premiums results in an increase in Insurance expense of \$423 as calculated in the table below.

Wastewater Allocation Factor	0.06%
2021 Unaudited Total KAW 55710000 - Insurance General Liability	\$ 565,930
2022 Unaudited Total KAW 55720000 - Insurance Workers Compen	97,484
Sewer General Insurance Allocation	361
Sewer Workers Compensation Allocation	62
Total Insurance Allocation	<u>\$ 423</u>

(I) Management Employee Benefits. Kentucky-American proposed to increase its test-year Employee Pensions and Benefits expense of \$87,328 by \$2,211 for a pro forma level of \$89,539.<sup>57</sup> Kentucky-American explained that its proposed adjustment was based on an allocation of benefit load factor on Kentucky-American’s management salaries was used in Case No. 2018-00358.<sup>58</sup> Applying the 21.80 percent load factor to the \$28,372 management salary allocation, Commission Staff calculates a pro forma adjustment to Employee Pensions and Benefits expense for management employee benefits of \$6,185.<sup>59</sup>

(J) Rate Case Amortization. Kentucky-American proposed to increase its test-year Operating Expenses by \$8,750 to amortize its estimated legal fee of \$35,000

<sup>57</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Sewer Operations and Maintenance Expenses and References, Ref (3).

<sup>58</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, References, Ref (3).

<sup>59</sup> \$28,372 (Management Salary Allocation) x 21.80% (Employee Benefit Allocation Load Factor) = \$6,185.

amortized over four years.<sup>60</sup> Kentucky-American provided documentation showing that as of February 28, 2022, it had spent \$43,766 on legal fees associated with this rate case. Amortizing actual legal fees of \$43,766 results in an increase to Operating Expenses of \$10,942.<sup>61</sup>

(K) Depreciation. Kentucky-American reported a test-year depreciation expense of \$467,299.<sup>62</sup> In responding to Commission Staff discovery, Kentucky-American stated that for several utility accounts (i.e.; 354200, 354300, 354400, 360000, 361100, 361101, 380000, 381000, 393000) Kentucky-American uses multiple depreciations rates based on the service territory the asset is located.<sup>63</sup> Kentucky-American explained that, typically, it would not use different depreciation lives for identical asset categories that are located in different service territories.<sup>64</sup> However, because Kentucky-American has not performed a depreciation study for its wastewater assets, depreciation rates were established at the time of each acquisition.<sup>65</sup>

Kentucky-American provided a revised depreciation schedule that adopted uniform depreciation lives for each asset category.<sup>66</sup> Kentucky-American's revised depreciation schedule results in a decrease to test-year depreciation expense of \$17,343. In reviewing Kentucky-American's revised depreciation lives, Commission Staff believes

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<sup>60</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_Operations\_and\_Maintenance\_Expenses.pdf, Sewer Operations and Maintenance Expenses and References, Ref (2).

<sup>61</sup>  $\$43,766$  (Actual Legal Fee – Rate Case)  $\div$  4 (Years) =  $\$10,942$ .

<sup>62</sup> Application, 4.\_KAWC\_Case\_No.\_2021-00434\_Schedule\_of\_Adjusted\_Operations.pdf.

<sup>63</sup> Kentucky-American's Responses to the Staff's Second Request, Item 1.c.

<sup>64</sup> Kentucky-American's Responses to the Staff's Third Request, Item 6.a.

<sup>65</sup> Kentucky-American's Responses to the Staff's Third Request, Item 6.a.

<sup>66</sup> Kentucky-American's Responses to the Staff's Third Request, Item 6.b.

that they result in a reasonable annual depreciation expense and recommends that depreciation expense \$467,299 be decreased by \$17,343 to a pro forma level of \$449,956.

(L) Interest Synchronization. Kentucky-American proposed a pro forma interest expense of \$142,792.<sup>67</sup> Kentucky-American applied its weighted cost-of-debt of 1.92 percent to the sewer division's rate base of \$887,835, which is commonly referred to as interest synchronization.<sup>68</sup> Interest synchronization limits the recovery of interest expense to the level of debt that is actually supporting the sewer division's rate base investment. This is the methodology the Commission has historically used to calculate Kentucky-American's interest expense.<sup>69</sup>

Kentucky-American included in its proposed rate base a working capital allowance of \$110,979.<sup>70</sup> In calculating its proposed working capital, Kentucky-American used the 45-day or 1/8 formula approach.<sup>71</sup> The 1/8 formula approach is an alternate method that has been historically accepted by this Commission, is easy to apply, and will result in a reasonable working capital allowance.<sup>72</sup> Applying the 1/8 formula method to Commission Staff's pro forma operation and maintenance expense results in a working capital

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<sup>67</sup> Application, 7.\_KAWC\_Case\_No.\_2021-00434\_Depr,\_Interest,\_\_Cap\_Strux.pdf.  $\$7,437,100$  (Kentucky-American's Rate Base) x 1.92% (Weighted Cost of Debt) = \$142,792.

<sup>68</sup> Application, 7.\_KAWC\_Case\_No.\_2021-00434\_Depr,\_Interest,\_\_Cap\_Strux.pdf.

<sup>69</sup> Case No. 2014-00390, Mar. 31, 2015 Staff Report at 14–18.

<sup>70</sup> Application, 7.\_KAWC\_Case\_No.\_2021-00434\_Depr,\_Interest,\_\_Cap\_Strux.pdf

<sup>71</sup> Application, 7.\_KAWC\_Case\_No.\_2021-00434\_Depr,\_Interest,\_\_Cap\_Strux.pdf

<sup>72</sup> Case No. 2014-00390, Mar. 31, 2015 Staff Report at 14–18.

allowance of \$110,441,<sup>73</sup> which is \$538 less than working capital allowance proposed by Kentucky-American. The Commission Staff has determined that the \$538 reduction to rate base results in an interest expense of \$142,782.<sup>74</sup>

OVERALL REVENUE REQUIREMENT AND  
REQUIRED REVENUE INCREASE

Using the operating ratio method as proposed by Kentucky-American, Commission Staff determined that Kentucky-American requires an Overall Revenue Requirement for its sewer division of \$1,643,282. As shown below, a revenue increase of \$940,985, or 137.39, percent is required.<sup>75</sup>

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<sup>73</sup> \$883,531 (Commission Staff Pro Forma Operation and Maintenance expense) x 12.50% (1/8 Factor) = \$110,441.

<sup>74</sup> \$7,436,562 (Commission Staff Rate Base) x 1.92% (Weighted Cost of Debt) = \$142,782.

<sup>75</sup> As previously discussed, adjusting Kentucky-American's revenue requirement calculation to reflect its billing analysis results in an actual requested increase of \$970,737, or 141.73 percent. This is an increase that is \$29,752 greater than the increase recommended by Commission Staff.

	Kentucky-American Sewer	Commission Staff
Pro Forma Operating Expenses before Income Taxes	\$ 1,314,076	\$ 1,294,451
Divide by: Operating Ratio	88%	88%
Sub-Total	1,493,268	1,470,967
Less: Pro Forma Operating Expenses before Income Taxes	(1,314,076)	(1,294,451)
Net Operating Income Allowable	179,192	176,516
Add: Provision for State and Federal Income Taxes	30,421	29,533
Interest Expense	142,792	142,782
Pro Forma Operating Expenses before Income Taxes	1,314,076	1,294,451
Total Revenue Requirement	1,666,481	1,643,282
Less: Other Operating Revenues	(10,825)	(17,378)
Interest Income		
Revenue Required from Water Sales	1,655,656	1,625,904
Less: Normalized Revenue - Sewer	(716,829)	(684,919)
Required Revenue Increase	\$ 938,827	\$ 940,985
Percentage Increase	130.97%	137.39%
Revenue	1.0000	1.0000
Less: 5% State Income Tax	(0.0500)	(0.0500)
Sub-Total	0.9500	0.9500
Less: 21% Federal Income Tax (Of Sub-Total)	(0.1995)	(0.1995)
Percentage Change in NOI	0.7505	0.7505
Revenue Gross Up Factor (Revenue Divided by Change NOI)	1.33245	1.33245
Multiplied by: Allowable Net Operating Income	179,192	176,516
Net Operating Income before Income Taxes	238,764	235,199
Less: Allowable Net Operating Income	(179,192)	(176,516)
Difference - Provision for Income Taxes	59,572	58,683
Income Tax - Revenue Req.	59,572	58,683
Less: Def Tax Amort.	(29,151)	(29,150)
Net Income Tax	30,421	29,533

Signatures

/s/ Mary Beth Purvis

Prepared by: Mary Beth Purvis  
Director  
Division of Financial Analysis

/s/ Mark Frost

Prepared by: Mark Frost  
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/s/ Jason Green

Prepared by: Jason Green  
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APPENDIX

APPENDIX TO COMMISSION STAFF'S REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00434 DATED APR 25 2022

The following rates and charges are prescribed for the customers in the area served by Kentucky-American Water Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

Monthly Sewage Rates

PHASE 1

For Service Rendered from June 1, 2022 to May 31, 2023

Ridgewood Subdivision

Monthly Rate \$ 43.54

Millersburg

Monthly Rate \$ 0.01437 Per Gallon

Owenton

First 2,000 Gallons \$ 33.69 Minimum Bill  
Next 1,000 Gallons 0.01530 Per Gallon  
Next 2,000 Gallons 0.01204 Per Gallon  
Next 5,000 Gallons 0.01090 Per Gallon  
Next 10,000 Gallons 0.00975 Per Gallon  
Next 20,000 Gallons 0.00860 Per Gallon  
All Over 40,000 Gallons 0.00820 Per Gallon

North Middletown

First 2,000 Gallons \$ 29.73 Minimum Bill  
Next 3,000 Gallons 0.01254 Per Gallon  
Next 5,000 Gallons 0.01087 Per Gallon  
Over 10,000 Gallons 0.00902 Per Gallon

Rockwell

First 10,000 Gallons \$ 40.48 Minimum Bill  
Over 10,000 Gallons 0.00337 Per Gallon



All Over 40,000 Gallons 0.01264 Per Gallon

North Middletown

First 2,000 Gallons	\$	45.81	Minimum Bill
Next 3,000 Gallons		0.01932	Per Gallon
Next 5,000 Gallons		0.01675	Per Gallon
Over 10,000 Gallons		0.01390	Per Gallon

Rockwell

First 10,000 Gallons	\$	62.38	Minimum Bill
Over 10,000 Gallons		0.00519	Per Gallon

PHASE 4

For Service Rendered from June 1, 2025 to May 31, 2026

Ridgewood Subdivision

Monthly Rate	\$	83.42	
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Millersburg

Monthly Rate	\$	0.02754	Per Gallon
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Owenton

First 2,000 Gallons	\$	64.55	Minimum Bill
Next 1,000 Gallons		0.02932	Per Gallon
Next 2,000 Gallons		0.02307	Per Gallon
Next 5,000 Gallons		0.02089	Per Gallon
Next 10,000 Gallons		0.01868	Per Gallon
Next 20,000 Gallons		0.01647	Per Gallon
All Over 40,000 Gallons		0.01572	Per Gallon

North Middletown

First 2,000 Gallons	\$	56.95	Minimum Bill
Next 3,000 Gallons		0.02402	Per Gallon
Next 5,000 Gallons		0.02082	Per Gallon
Over 10,000 Gallons		0.01728	Per Gallon

Rockwell

First 10,000 Gallons	\$	77.56	Minimum Bill
Over 10,000 Gallons		0.00646	Per Gallon

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